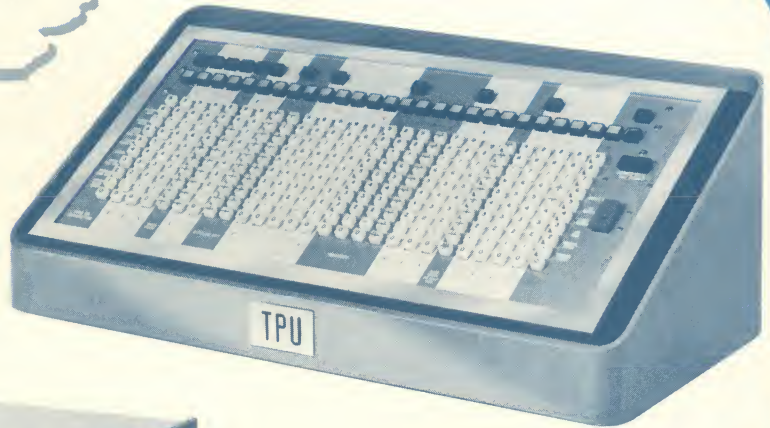
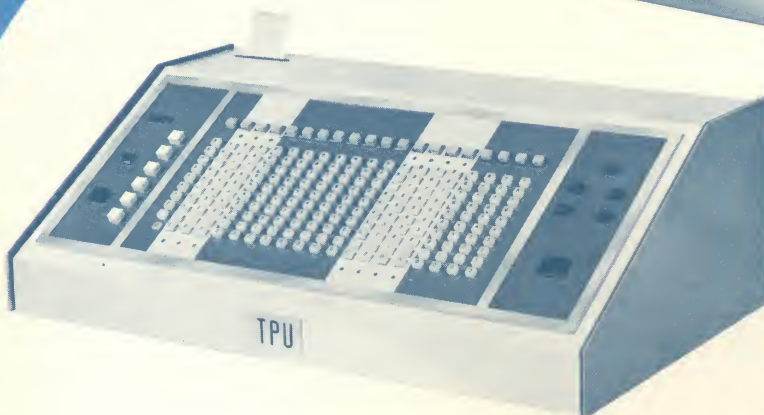


TPU

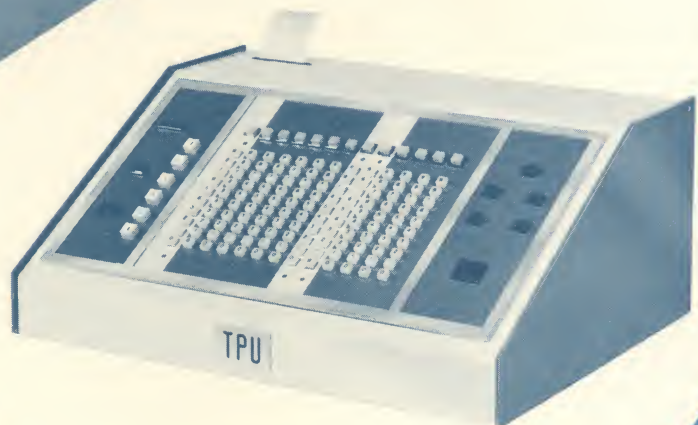
TAPE PREPARATION UNIT



ORDER ENTRY



REMOTE DATA COLLECTION



BRANCH SALES STATISTICS



DIGITAL ELECTRONIC MACHINES, INC.

INPUT NEED

An unbalance exists between high-speed electronic computers and the comparatively slow-speed computer input devices now being used in business and industry. Computers are in operation that function at microsecond and nanosecond speeds, each new model faster than its predecessor. As this internal working speed has increased, machines used to record computer readable input data have not kept pace with business needs and computer development.

The development and production of new and better computer input equipment is the area in which Digital Electronic Machines specializes.



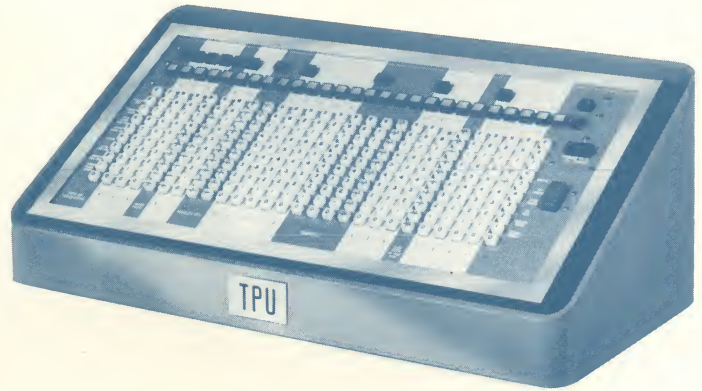
CUSTOMIZED-MODULAR CONSTRUCTION

The TPU line of data acquisition equipment is constructed to satisfy each individual customer's data capturing requirements. This is accomplished by using a group of standard component assemblies in a custom combination that incorporates the necessary features and options to fit a specific application.

Business, Engineering, and Industrial users of data processing equipment find the custom keyboard indispensable for fast, accurate data collection application.

CATALOG ORDER ENTRY

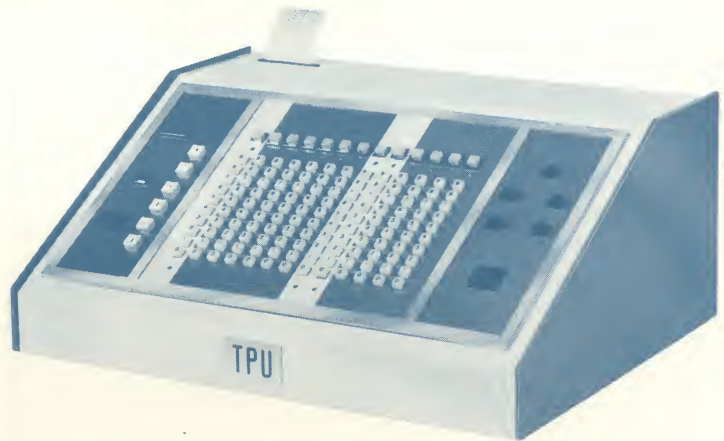
This phase of the retailing industry immediately adapts to low-cost data collection, using the TPU. TPU equipment is simple to operate; economical to lease or purchase; reliable and accurate. All these capabilities are housed in a small, attractive unit to conserve premium working space. A full keyboard TPU unit has the versatility and expansion capability to handle easily the many types of catalog items.



BRANCH STORE STATISTICS

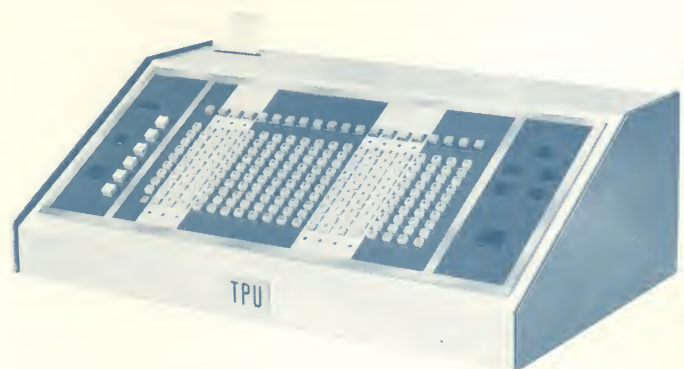
Sales analysis, inventory, stock ordering, cash receipts, return of goods previously sold—all these are important to the home office of a retail store chain. Without automation all these statistics are available, but not in a current status. TPU allows a branch to gather all the source material for that particular store in computer-ready tape, then transfer complete information to management as changes are occurring. Especially where a large percentage of items depend on constant competitive change, the TPU is used to avoid overstock conditions which result in obsolete merchandise.

The TPU's low unit cost, versatility and operational simplicity is ideally suited for capturing branch store data currently.



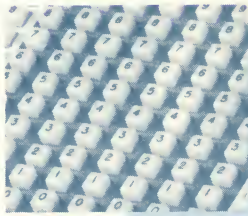
IN-PLANT DATA COLLECTION

TPU units aid modern manufacturers and industries with remote data information of inventory status, stock control and shipments. To inform management (on a current basis) of raw materials, parts ordering, tool control, parts inventory, in-process operations, inspection, shipping, invoicing—the combined data must show the over-all plant picture at a specific time in the process. These requirements are best handled by a full keyboard application-oriented TPU data collection unit, providing complete information in computer-ready format for immediate processing.



the TPU offers new versatility for

- in-plant processes
- branch store statistics
- low-cost catalog order entry



DATA ENTRY KEYBOARD

The basic TPU has a 15-row numeric keyboard. Optionally, you may have a TPU with 10, 16, 20 or even 25 rows...the number is determined by your application. Alpha or other special engraving is also available.

The TPU's full keyboard eliminates lengthy, special operator training, and the easy-action keys encourage fast, accurate data collection with minimum operator fatigue. The entire entry is visible to the operator for sight checking and correction, if needed, before punching takes place.



CHECK DIGIT VERIFIER AND INDICATOR LIGHT

Solid state device—checks 7-column entry for accuracy of entry; one of the seven columns is the check digit, verifying a formula computation using the other six digits. This important option

insures against transposition or incorrect entry; check digit error light will glow if an incorrect entry is made and the TPU is inoperative until the error is corrected. Available for up to ten-digit number.



TRANSACTION KEYS

A basic TPU has six transaction keys for program selection. These keys activate the operation indicator lights and the program control circuit, indicating the columns that require data entry. They also punch a code on tape, showing the

type of transaction. Additional transaction keys are optionally available.

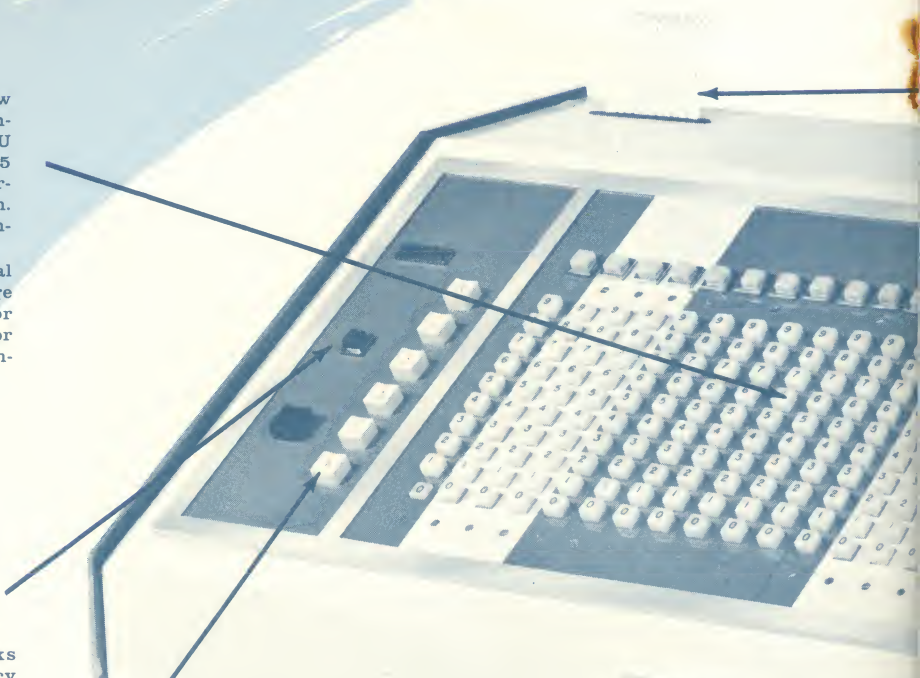


DAY-GLO KEY TOPS

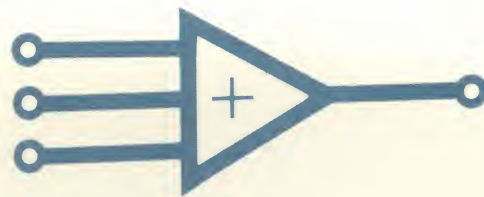
A special luminous key top that illuminates only when depressed, to display the digit that has been stored in that column. No bulb or electrical connection is necessary.

TAPE CONDITION LIGHT

Displays tape condition by lighting if any of the following conditions occur: tape is broken, tight, or tape supply is low.



remote data collection



- custom fitted to your needs
- fast, accurate data acquisition
- assures current management data

PRINTED ADDING MACHINE TYPE TAPE

Prints a numeric display of data that has been entered into the keyboard and punched into paper tape.



OPERATION INDICATOR LIGHTS

These lights are used for program display, and are illuminated when a transaction key is selected. Depression of a key in a row turns off the operation indicator light above that row, making it possible to determine at a glance if the entry is complete and correct. The operator must enter data in every column indicated by the light display over the individual columns before data can be punched into tape.



OK-TO-RECORD LIGHT

Indicates to the operator that the TPU is ready to punch. Lights when: program control supervision program is satisfied with the proper data entry; check digit verifier is satisfied; tape condition light is off.



RECORD BAR

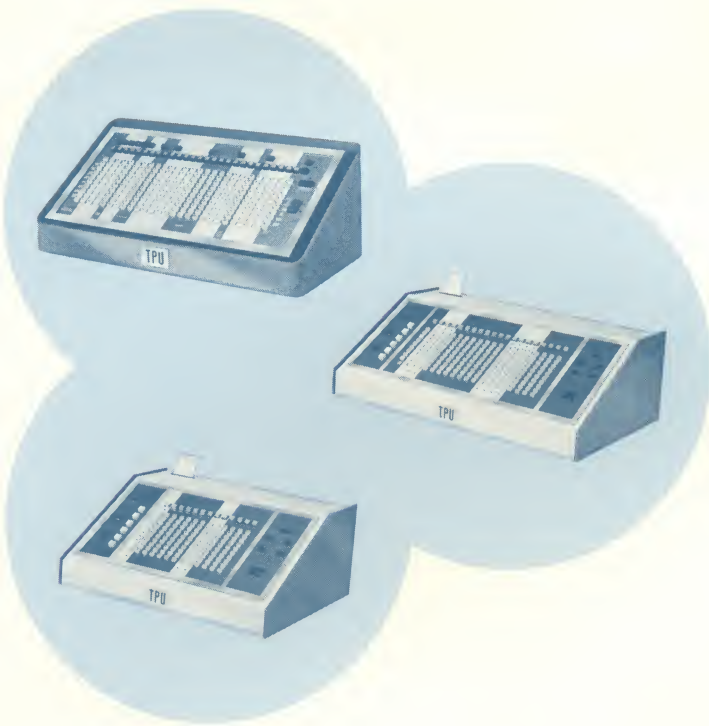
Activates the TPU—causes scanning of the keyboard data deck and punching of a complete transaction into tape. Inoperative unless the "OK-TO-RECORD" light is illuminated.



RESET ALL KEY

Momentary pushbutton key — resets the entire data entry pushbutton keyboard.





TPU

FEATURES

SIMPLE TO OPERATE

The TPU keyboard layout is designed with the equipment operator in mind, so that minimum operator training is required to produce high accuracy and speed in the data collection operation. Minimum-touch control and data keys assure minimum operator fatigue.

VERSATILE

The TPU keyboard input unit is versatile: with the basic 15 bank TPU, selective optional features and the availability of customer engineering personnel in our engineering department to develop new options, the TPU is a multi-capable unit for computer input. Multi-programming functions make the TPU useful in many areas—payroll, inventory, sales analysis, accounting, etc.

ACCURATE

The TPU maintains the highest degree of accuracy in punched tape output. The program indicator lights, check digit verifier, punch condition indicator, transaction keybuttons, and color coding of individual columns or fields of

the data entry keyboard all combine to insure maximum accuracy. Punching circuitry is dependent on proper entry of data into the data key deck. Tape punching cannot occur if data is positioned incorrectly by the operator. The TPU indicates to the operator where the error in entry has been made.

COMPACT SELF-CONTAINED KEYBOARD AND PUNCH

The TPU is compatible in exterior appearance with existing computer peripheral equipment. It is compact. The paper tape punch is an integral part of the basic unit, and any or all of the optional features can be installed in the same unit.

RELIABLE

Digital Electronic Machines manufactures into its products the highest degree of reliability, comparable to the reliability existing in the most advanced computers. Internally, the TPU has been engineered with the electronics mounted on removable printed circuit boards for ease and speed in maintenance.

CUSTOM APPLICATION ASSISTANCE

The TPU is application oriented. For most efficiency in operation, a close liaison with the customer is created. From the inception of the data-capturing application to and past the actual installation of the tape preparation units, Digital Electronic Machines provides complete customer assistance.

DESIGN FEATURES

All modular construction. Components are on printed circuit boards for maximum reliability.

STANDARD UNIT FEATURES

- 15 banks 0-9 pushbutton keys
- Program indicator lights
- On-off switch
- Tape-feed pushbutton key
- Record bar
- Tape condition light
- OK-to-record light
- Individual reset key
- Reset-all key button
- 6 transaction pushbutton keys
- Punch mounted on rear panel—hinged door access
- Tape handling—reel take up
- Flat working area—above keyboard
- Any tape output code 0-9, space, begin and end message (5-6-7-8 channel)
- Arc suppression

APPEARANCE

Shape and color are designed to blend easily into any office decor or computer installation.

SERVICE PROGRAM

Maintenance is provided at 120 service outlets nationwide. Annual maintenance contracts available.

OPTIONAL FEATURES

A list of optional features is available to expand the standard 15-bank TPU to satisfy individual customer requirements.

- Check digit verifier and indicator
- Static tab card reader—single card
- Hopper-fed tab card reader—500-card capacity
- Badge card reader
- Printed adding machine type tape
- Transaction counter
- Ticket validation
- Special painting
- Extra pushbutton key banks
- Field definition code
- Void key
- Parity check
- Optical font printer
- Accumulator-specified number of digits
- Special supervision and indicator light programming
- Dial inputs for constants
- Day-glo key tops

WARRANTY

Digital Electronic Machines, Inc. warrants its equipment to be free from defect in materials and workmanship. The sole obligation, under this warranty, is to bear the cost of parts and labor for the repair or replacement of equipment which fails to meet the applicable specification within 90 days after installation.

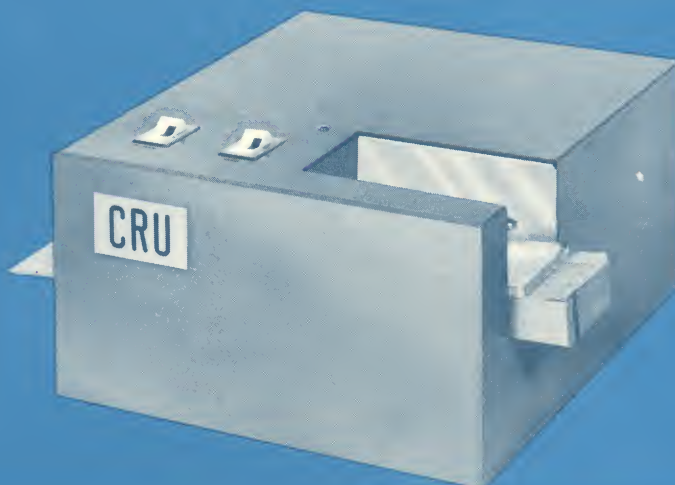
This warranty does not extend to any products which have been subject to misuse, neglect, accident, improper installation or application.

All requests for service should refer to the model and serial number of the equipment. The above warranty to repair or replace defective equipment is in lieu of all other warranties, express or implied, statutory or otherwise, and Digital Electronic Machines, Inc. shall not be liable for damages or delays.

OTHER PRODUCTS

CRU—the automatic, hopper-fed Card Reading Unit fulfills requirements for a low-cost, versatile card-input device that is suited to a wide range of applications.

The CRU is intended as a direct, on-line input to such equipment as: teletype machines, Bell System communications data sub-sets, low-cost computing systems, billing and accounting machines, and industrial process control systems. The CRU converts any tab card code configuration to any output code pattern. The output is normally character serial-bit parallel, and is offered optionally as a character serial-bit serial output for use with teletype or data-set equipment.

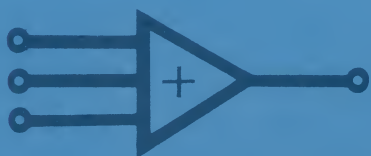


CTU (Card-to-Tape Converter)—Can read standard 80- or 51-column tab cards or edge-punched cards, and transfer their data into punched paper tape for use with computers, business machines, automatic test equipment, automatic control equipment, numerically-controlled machine tools and similar data handling devices. CTU has an automatic hopper feed, can punch 5-, 6-, 7- or 8-channel code in the output tape, and has a read-punch speed of 1,000 characters per minute.



INSTRUMENTATION—Digital Electronic Machines also manufactures custom data acquisition systems for measuring and process control functions. Applications have included jet engine test facilities, computer-controlled ultra-precision electro-plating systems, digital plotting of engine pressure volume curves, and automation of varied machine production line control and data acquisition functions.

For a demonstration or additional information on the TPU, contact nearest sales or service outlet, or contact us direct:



DIGITAL ELECTRONIC MACHINES, INC.

2130 JEFFERSON STREET KANSAS CITY, MISSOURI 64108

TELEPHONE: 816/421-3181

TWX: 910-771-2067

DIGITAL ELECTRONIC MACHINES, INC.

2130 JEFFERSON, KANSAS CITY, MISSOURI 64108

AREA CODE 816 HARRISON 1-3181

Dear Sir:

I have enclosed a brochure on our T P U (tape preparation unit) and information sheets on our C R U-T T Y (card read unit for teletype machines) and the C T U (card to punched tape converter unit). These units are in production, and we are delivering units on a 60 to 90 day delivery schedule.

I especially recommend you look closely at the C R U unit which can be connected directly to your teletype machines, either the 60 or 100 word per minute model. This gives you a lower cost equivalent of an IBM 1050 or 1912 communications system. The 1050 system, if you are not aware, is like a card transmission and a teletype system combination but with a cost more than 50% higher than the Digital Electronic Machines C R U-T T Y combination. This C R U-T T Y provides you with tab card transmission capability, your only additional expense being the C R U cost and a connection charge to connect the C R U to your teletype. The unit is adjustable to any of the teletype systems now in use and to those in development. Therefore, your C R U will not become obsolete if you change teletype machines as newer models become available.

A combination of our C R U-T P U-C T U units provides any company with the latest in second generation data collection and data transmission flexibility. The C R U can, of course, be connected to a data set by itself for transmission over communication lines or for use as an in plant data collection system.

The T P U should be of significant interest to those individuals who are developing the latest systems in their companies for data collection. The T P U units can be tied on line to any computer system. In the standard unit a paper tape punch is incorporated which allows the unit to be self contained as a data collection unit usable in remote locations, branch outlets, warehouses or plants.

The T P U-C R U combination, as an online input to a computer, combination input to a teletype, or for remote data collection can be integrated into any company's EDP system, working equally as well with all computer equipment types.

Thank you for your inquiry. We are available to assist you in the development of your data collection and transmission systems, and we look forward to hearing from you.